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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Yoichi KATAYAMA

Serial No.: 10/577,769

Group Art Unit: 2812

Filing Date: April 28, 2006

Examiner: Unknown

For: IMAGE DECODING APPARATUS AND IMAGE DECODING METHOD

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450



**PAPER**

Sir:

Submitted herewith is the Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability dated May 11, 2006.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Sean M. McGinn".

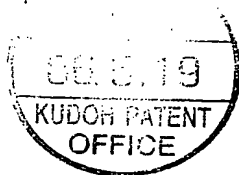
Sean M. McGinn  
Registration No.: 34,386

Date:

7/28/06

**MCGINN INTELLECTUAL PROPERTY  
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**PCT**

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING  
TRANSMITTAL OF COPY OF INTERNATIONAL  
PRELIMINARY REPORT ON PATENTABILITY  
(CHAPTER I OF THE PATENT COOPERATION  
TREATY)

(PCT Rule 44bis.1(c))

To:

KUDOH, Minoru  
6F, KADOYA BLDG., 24-10, Minamiooi 6-chome,  
Shinagawa-ku, Tokyo  
1400013  
JAPON

Date of mailing (day/month/year)

11 May 2006 (11.05.2006)

Applicant's or agent's file reference

04PCFP1024

**IMPORTANT NOTICE**

International application No.

PCT/JP2004/016200

International filing date (day/month/year)

26 October 2004 (26.10.2004)

Priority date (day/month/year)

30 October 2003 (30.10.2003)

Applicant

NEC ELECTRONICS CORPORATION et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.+41 22 740 14 35

Form PCT/IB/326 (January 2004)

Authorized officer

Yoshiko Kuwahara

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# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference <b>04PCFP1024</b>	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. <b>PCT/JP2004/016200</b>	International filing date ( <i>day/month/year</i> ) <b>26 October 2004 (26.10.2004)</b>	Priority date ( <i>day/month/year</i> ) <b>30 October 2003 (30.10.2003)</b>
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant <b>NEC ELECTRONICS CORPORATION</b>		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

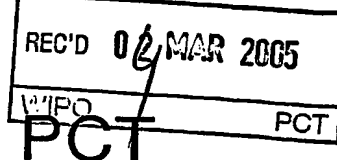
Date of issuance of this report <b>01 May 2006 (01.05.2006)</b>	Authorized officer  <b>Yoshiko Kuwahara</b>
Telephone No. +41 22 338 90 90	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Facsimile No. +41 22 740 14 35
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# PATENT COOPERATION TREATY

12/05

From the  
INTERNATIONAL SEARCHING AUTHORITY



To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/JP2004/016200

International filing date (day/month/year)  
26.10.2004

Priority date (day/month/year)  
30.10.2003

International Patent Classification (IPC) or both national classification and IPC  
H04N7/26

Applicant  
NEC ELECTRONICS CORPORATION

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
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Authorized Officer

Lindgren, J

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/016200

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/016200

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**Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or  
Industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	7-11,18-22
	No: Claims	1-6,12-17,23
Inventive step (IS)	Yes: Claims	9-11,20-22
	No: Claims	1-8,12-19,23
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:  
D1: EP-A-0 910 219 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 21 April 1999 (1999-04-21)  
D2: EP-A-1 233 625 (SANYO ELECTRIC CO. LTD) 21 August 2002 (2002-08-21)
2. General objections concerning **Article 6 PCT**  
The claims are generally unclearly written due to several semantic errors as well as the usage of unclear terms. The attentive re-drafting of the claims would most likely resolve said unclarities.
3. Independent claim 1
  1. **Clarity (Article 6 PCT)**  
The term "a process quantity", the term "a unit process time" and the antecedent to "based on a parameter" (is it the process quantity or the unit process time that is based on a parameter?) render the claim unclear and these deficiencies must be remedied. It is also not clear from the wording of the claim if the "process quantity...to each of a plurality of...processes" means that there is a plurality of different measures determined for each of the processes or if there is only one measure determined and whether this/these measure/s is/are provided to said processes or not. Furthermore is the antecedent to "within a unit process time" unclear, is the determination of the measure done within said time or is the measure determined a "quantity per unit process time measure"?
  2. **Novelty (Article 33(2) PCT) / Inventive step (Article 33(3) PCT)**  
Furthermore, the above-mentioned lack of clarity notwithstanding, after interpreting the subject matter of claim 1 in the light of the description, the claim does not meet the requirements of **Article 33(2) PCT**, because the subject matter of the claim is not considered new. Document D1, which is considered to represent the most relevant state of the art, discloses an apparatus with an analysing section (240 in figure 2) which determines a

process quantity (any a size or time) within a time unit (e.g., the time per frame of input encoded image data) of coded image data for each of a plurality of image decoding processes (reduction of "processing power" for one or more of the decoder processes, see [0010]). The measure of quantity per unit time is determined from a parameter of said coded image data (see [0008]-[0009]) prior to the decoding (implicit and obvious from paragraph [0037]) of the image data with said decoding processes. The apparatus also comprises an image decoding section that carries out said decoding processes for the corresponding determined process quantity (amount of data or duration of time) such that decoded image data is generated (210 of figure 2).

The claim is thus not novel (**Article 33(2) PCT**).

If claim 1 was to be made novel (e.g., by adding one or several of the features of claims 2-8) it would still not be considered inventive (**Article 33(3) PCT**) as the features disclosed in claims 2-8 are all considered obvious or to be found in the cited prior art (see below).

4. Independent claims 12 and 23

What has been said above with reference to claim 1 concerns claims 12 and 23 *mutatis mutandis*. Furthermore is claim 12 unclear (**Article 6 PCT**) in so far as in the broadest interpretation of its present formulation does the claimed subject matter also claim *protection of any mental act* of determining a "process quantity".

5. Dependent claims

Dependent claims 2-8, 13-19 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:

Claims 2-4, "said throttling may be based on one or more measures" ([0008]) is interpreted as one or more parameters in the sense of claim 2. Paragraphs [0009], [0036] and [0037] of D1 further give examples specifying this/these parameters as the indication of bit stream elements, the number of macroblocks, the picture coding type and temporal references where said parameters can be inserted in the bit stream by the encoder (in a header or as information in an additional bit stream) or be implied by some bit stream elements. It is thus regarded disclosed in D1, explicitly or implicitly, that the



parameters can be internal, external or a combination of both.

Claim 5 specifies the unclear term "process quantity of image data" of claim 1 as a "code block process quantity" and the operation of the apparatus disclosed in claim 1 as operating on blocks of encoded data. That image data is coded block-wise is however common practice in the field. As well does "decoding of that particular element" [0037] and "pixel region" as well as "macroblock" [0038] in D1 implicitly imply the natural division of the image in blocks.

Claim 6, image data forms part of a data stream (abstract of D1). As temporal reference and picture coding type as well as horizontal and vertical size and frame rate is extracted from the bit stream ([0036] and [0041] or D1) can not the features of claim 6 be considered as adding any inventive matter to the claims on which claim 6 depends.

Claim 7 discloses well-known components of JPEG-2000. See D2, figure 2. Claim 8 discloses the decoding system of claim 1 for JPEG-2000 (see D2) encoded image data. That is, claim 8 specifies the "decoding processes" of claim 1 as belonging to the well-known standard of JPEG-2000. This can of course not be considered inventive.

The subject matter of **claim 9 does not appear to be obvious** on the basis of the presently available prior art.

Claims 10 and 11 are dependent on claim 9 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Claims 13-19, see objections raised against corresponding claims 2-8.

Claims 20-22 are for the same reasons as claims 9-11 considered novel and inventive.

6. The present system/method relates to electronics and in particular to the design of a system for later production of devices that are manufactured by industry. Thus, the present claims possess industrial applicability.

J Lindgren